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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Masato IMAI, et al. ATTORNEY DOCKET NO.: 09793822-0149  
SERIAL NO.: 09/894,566 GROUP ART UNIT: 2871  
DATE FILED: June 28, 2001 EXAMINER: H. NGUYEN  
INVENTION: "LIQUID CRYSTAL DISPLAY APPARATUS AND METHOD FOR PRODUCING SAME"

**RESPONSE "A" TO NON-FINAL OFFICE ACTION**

BOX Non Fee Amendment  
Commissioner for Patents  
Washington, DC 20231

RECEIVED  
JAN 15 2003  
TECHNOLOGY CENTER 2800

SIR:

This amendment is filed in response to the Office Action of October 8, 2002. Please reconsider the application in view of the amendments and remarks presented below.

**AMENDMENTS****Claims**

Please amend the following claims:

1. (Once amended.) A liquid crystal display device comprising:  
a pair of substrates arranged facing each other with a pre-set gap in-between;  
liquid crystals held in said gap;  
means for applying an electrical field to said liquid crystals to change the state of orientation thereof;  
a wall structure formed in each of small-sized areas obtained on sub-division along at least one substrate for orienting the liquid crystals lying each small-sized area axially symmetrically on application of said electrical field, said wall structure encompassing a rectangular area; and  
a groove structure formed in each of said small-sized areas and adapted for adjusting the axial symmetrical orientation of said liquid crystals in cooperation with said wall structure,  
wherein said groove structure extends along diagonal lines of said rectangular area encircled by said wall structure.